## **REMARKS**

We are in receipt of the Office Action dated November 3, 2004, and the above amendment and following remarks are made in light thereof.

Claims 2, 4 and 22-26 are pending in the application. Pursuant to the Office Action, claims 2, 4 and 22-26 are rejected pursuant to 35 USC 102(e) for being anticipated by Mercuri U.S. 5,985,452 (claim 2) or Davis et al. 6,451,486 (claims 4 and 22-26). Claims 4 and 22-26 are also rejected under 35 USC 112, par. 1, for failing to comply with the written description requirement. Objections are also made to the specification and to claim 25.

Turning first to the Examiner's objections to the specification, by the foregoing amendment, the first paragraph of the specification has been amended to recite the patent number and issue date of the parent application. Paragraph [0008] has also been amended to include the percent sign, as requested by the Examiner. Paragraphs [0004] and [0013] have also been amended to correct certain typographical errors.

The Examiner also objected to the amendment filed on September 9, 2003 on the ground that introduced new matter into the disclosure. Specifically, the Examiner objects to the inclusion in paragraph [0008] of the following: "The mixtures may contain between 0.1 and 99.9 wt. % expanded graphite." The Examiner asserts that the inclusion of this language is not supported by the parent application.

The recited language as to the mixture comprising between 0.1 and 99.9 wt. % expanded graphite was set forth expressly in claim 4, as filed, of the parent application. Claim 4 was maintained in the present application for the purposes of showing the Examiner the basis for the amendment to the specification which is now objected to. The MPEP, 608.01 (I) clearly indicates that "In establishing a disclosure, Applicant may rely not only on the description and the drawing as filed but also on the original claims if their content justifies it." (Emphasis added).

Accordingly, Applicant submits that the amendment to paragraph [0008] to which the Examiner objects did <u>not</u> introduce new matter.

Similarly, claim 4 is rejected under 35 U.S.C. 112 for failing to comply with the written description requirement, the Examiner contending that the parent application does not support the recitation of "the mixture comprises between 0.1 and 99.9 wt. % expanded graphite." As set for the above, claim 4 has been maintained from the parent application, as filed. Thus, verbatim support for claim 4 exists in the parent application. Again, see MPEP 608.01 (l).

Applicant believes that some of the confusion that the Examiner may have in this regard is because, in the Office Action, the Examiner references the patent (specifically, claim 9 thereof) that issued from the parent application, rather than the parent application. Accordingly to assist the Examiner in her review of this matter, a copy of the parent application, as published, accompanies this response.

The Examiner also asserts that there is no written description for the subject matter of claims 22-26. By the present Amendment, claims 23-25 have been canceled, rendering their rejection moot. Claims 22 and 26 are similar in that they both call for a cathode comprising "carbon particles including between 25% and 75% non-expanded graphite particles by weight and between 25% and 75% expanded graphite particles by weight.

With reference to the published parent application, paragraph [0021], a cathode is taught which includes a graphite powder that is added for conductivity enhancement. As taught expressly by claim 4, the graphite powder comprises a mixture of expanded graphite and one or more graphite materials from the group consisting of natural flake, natural vein, amorphous and synthetic graphite. Each of these graphites is known by a person skilled in the art to be a "non-expanded" graphite. See Declaration of Igor V. Barsukov, attached hereto, Paragraphs 2 and 3. The wt. % of the expanded graphite in the mixture is between 0.1 and 99.9 wt. %, meaning that the wt. % of the "non-expanded" graphite in the mixture is between 99.9 and 0.1 wt. %. This

range entirely subsumes the range of 25 to 75 wt. % for the expanded/non-expanded graphite

called for by claims 22 and 26. Thus, a person of ordinary skill in the art would recognize that

Applicants had invented the subject matter of claims 22 and 26. Accordingly, Applicant requests

that the rejection of claims 22 and 26 under 35 U.S.C. 112, ¶1, be withdrawn.

Turning to the rejections for anticipation, by the foregoing amendment, claim 2 has been

amended to incorporate the limitations of claim 4. Accordingly, the rejection of claim 2 for

anticipation by Mercuri is rendered moot.

With respect to the rejection of claims 4 and 22-26 for anticipation by <u>Davis et al.</u>, claims

4 and 23-25 have been canceled, rendering their rejection moot. With respect to claims 22 and

26, see the attached Declaration of Igor V. Barsukov, which establishes a date of invention by

the Applicant for the subject matter of the rejected claims prior to the May 1, 2000 filing date of

Davis et al.

By the foregoing, Applicant believes that it has overcome all of the objections and

rejections made by the Examiner in the Office Action November 3, 2004 and, in view thereof,

respectfully request the Examiner to declare an interference between the pending application and

Davis et al.

Respectfully submitted,

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SUPERIOR GRAPHITE CO.

## ENGINEERED GRAPHITE BLENDING PROJECT

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BP #	Graphite Formula	d100	06P	d50	d10	M	sg.m./g.		g./cu.in. g./cc	22/:B
3-37	100 % 2935 AP	88.00	32.68	17.50	7.43	19.31	5.74	1.27	2.08	0.127
3-32	25 % GA-17 / 75 % 2935 AP	148.00	41.42	18.94	7.68	23.02	8.97	1.55	1.49	0.091
3-33	50 % GA-17 / 50 % 2935 AP	148.00	50.45	20.64	7.70	26.23	10.34	1.95	1.19	0.073
3-34	75 % GA-17 / 25 % 2935 AP	209.30	55.56	21.97	7.58	28.72	15.50	2.32	0.95	0.058
3-35	100 % GA-17	209.30	58.44	23.34	7.41	30.12	19.62	2.63	0.78	0.048
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3-38	100 % 2939 AP	31.11	15.95	9.11	4.57	9.82	8.80	1.31	1.38	0.084
3-29	25 % ABG-15 / 75 % 2939 AP	104.70	27.57	10.87	5.18	14.65	11.48	1.47	1.20	0.073
3-30	50 % ABG-15 / 50 % 2939 AP	104.70	31.83	12.44	5.47	16.48	14.46	1.74	1.04	0.063
3-31	75 % ABG-15 / 25 % 2939 AP	104.70	35.19	15.55	5.80	18.32	17.61	2.07	0.90	0.055
3-36	100 % ABG-15	88.00	35.47	16.27	2.97	19.01	21.29	2.43	0.76	0.046
SO3-13-2	SO3-13-21 EBG-40	104.70	38.09	16.73	6.26	20.10				
SO3-13-2	SO3-13-20 EBG-50	148.00	40.41	17.48	9:30	21.73				
SO3-13-1	SO3-13-19 EBG-30	148.00	40.51	16.96	6.30	21.36				

	22.67	21.10	19.28									
	6.56	6.08	6.11									
	17.84	16.86	16.44									
	43.44	40.18	36.54									
	148.00	148.00	88.00		·				-		٠	
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•	SO3-13-18 EBG-60	SO3-13-17 EBG-70	SO3-13-16 EBG-20									
	SO3-13-	SO3-13-	SO3-13-									

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Igor Barsukov

To: Dave Derwin/Superior Graphite@Superior Graphite, Peter

Zaleski/Superior Graphite@Superior Graphite

CC:

Subject: Name Designations for new EBG Grades

I hope you know this?



Mark Wanta

To: Igor Barsukov/Superior Graphite@Superior Graphite

cc:

Subject: Name Designations for new EBG Grades

Igor: I hope this make sense. Please let me know if I am incorrect in my thinking.

Grade	Description
EBG-20	ABG-15 >99.9C
EBG-30	blend of ABG-15 & -195 Flake (about 5% of this -100 mesh, 95C)
EBG-40	blend of ABG-15 and EMD ground on air mill (about 0.2% - 0.3%)
EBG-50	blend of ABG-15 and 1) 2935AP (about 50%) and EMD (about 0.3%)
EBG-60	blend of ABG-15 and 2) -199 Flake (about 50%)
EBG-70	blend of ABG-15 and 2935AP (about 50%)

Mark J. Wanta

Product Manager-Signature/ThermoPURE Products

P: 31 2-466-2856

F: 31 2-559-0453